Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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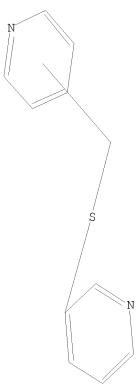
Uploading C:\Program Files\Stnexp\Queries\10561838h.str

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



G1 C,N

Structure attributes must be viewed using STN Express query preparation.

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=> s 11 sss
SAMPLE SEARCH INITIATED 12:59:07 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 832 TO ITERATE
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100.0% PROCESSED 832 ITERATIONS 7 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 14910 TO 18370

PROJECTED ANSWERS: 7 TO 298

L2 7 SEA SSS SAM L1

=> file caplus

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
0.49
0.71

FILE 'CAPLUS' ENTERED AT 12:59:21 ON 03 JUN 2010 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 3 Jun 2010 VOL 152 ISS 23 FILE LAST UPDATED: 2 Jun 2010 (20100602/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2010 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2010

CAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2010.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 12

L3 5 L2

=> s 13 and py<2005 25158280 PY<2005

L4 1 L3 AND PY<2005

=> d ibib abs hitstr

THE ESTIMATED COST FOR THIS REQUEST IS 5.81 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:529133 CAPLUS

DOCUMENT NUMBER: 131:157711

TITLE: Preparation of pyridinecarboxylates and analogs as

cholesteryl ester transfer protein inhibitors

INVENTOR(S): Lee, Len F.; Glenn, Kevin C.; Connolly, Daniel T.;

Corley, David G.; Flynn, Daniel L.; Hamme, Ashton; Hegde, Shridhar G.; Melton, Michele A.; Schilling,

Roger J.; Sikorski, James A.; Wall, Nancy N.;

Zablocki, Jeffrey A.

PATENT ASSIGNEE(S): G.D. Searle and Co., USA SOURCE: PCT Int. Appl., 327 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.						KIND DATE				LICAT	ION 1		DATE				
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		CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	, TG							
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										US 2	2000-	6008	70		A3 2	0001	211	
					US 2003-403903						A3 20030331							
US US US	US 6605624 US 20040038939						2004 2004	0226 0921		US 2 US 2 US 3 WO 3	2003- 2004- 1998- 1999- 2000-	4039 8529 7458 US18 6008	75 6P 71		20001211 < 20030331 < 20040525 < P 19980213 W 19990211 A3 20001211			

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 131:157711
GI

AB Title compds. [I; R2,R6 = H, OH, (fluoro)alkyl, alkoxy, etc.; R3 = OH, CHO, alkoxycarbonyl, (hetero)arylcarbonyl, etc.; R5 = H, halo, alkyl, alkoxy, etc.; R5 = H, halo, alkyl, alkoxy(carbonyl), etc.] were prepared

Thus, CF3C(NH2):C(CO2Me)COMe was refluxed with Ac2O/HC(OMe)3 and the product converted in 2 steps to I (R2 = CF3, R3 = CO2Me, R4 = OCHMe2, R5 = R6 = H). Data for biol. activity of I were given.

IT 237759-21-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyridinecarboxylates and analogs as cholesteryl ester transfer protein inhibitors)

RN 237759-21-6 CAPLUS

CN 3-Pyridinecarboxylic acid, 2-(difluoromethyl)-4-(2-methylpropyl)-5-[(2-pyridinylmethyl)thio]-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS

RECORD (19 CITINGS)

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file reg

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 9.12 9.83 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -0.85-0.85

FILE 'REGISTRY' ENTERED AT 13:00:37 ON 03 JUN 2010 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2010 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 2 JUN 2010 HIGHEST RN 1226851-61-1 DICTIONARY FILE UPDATES: 2 JUN 2010 HIGHEST RN 1226851-61-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 8, 2010.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> s l1 sss full THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 191.05 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y FULL SEARCH INITIATED 13:00:49 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 16631 TO ITERATE

100.0% PROCESSED 16631 ITERATIONS 155 ANSWERS SEARCH TIME: 00.00.01

L5 155 SEA SSS FUL L1

CA SUBSCRIBER PRICE

=> file caplus COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 191.54 201.37 FULL ESTIMATED COST DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL NTRY SESSION -0.8 ENTRY

-0.85

FILE 'CAPLUS' ENTERED AT 13:00:58 ON 03 JUN 2010 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 3 Jun 2010 VOL 152 ISS 23 FILE LAST UPDATED: 2 Jun 2010 (20100602/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2010 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2010

CAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2010.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 15

L6 22 L5

=> s 16 and py<2005 25158280 PY<2005

L7 9 L6 AND PY<2005

=> d 1-9 ibib abs hitstr

THE ESTIMATED COST FOR THIS REQUEST IS 52.29 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L7 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:756691 CAPLUS

DOCUMENT NUMBER: 141:260553

TITLE: Preparation of compounds having 4-pyridylalkylthio

group as inhibitors of angiogenesis and vascular

permeability

INVENTOR(S): Honda, Takahiro; Tajima, Hisashi; Sasabuchi,

Yoshimasa; Kawashima, Kenji; Okamoto, Kazuyoshi;

Yamamoto, Minoru; Ban, Masakazu

PATENT ASSIGNEE(S): Santen Pharmaceutical Co. Ltd., Japan

SOURCE: PCT Int. Appl., 350 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA.	PATENT NO.					KIND DATE					ICAT	ION I		DATE				
WO	2004	0787.	23		A1	A1 20040916			,	wo 2	004-	JP28		2	0040	305 <		
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		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	
							LV,											
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							DK,										•	
		•					SE,				BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	
				•			NE,											
JP	2005232149			Α		2005	0902	1	JP 2	004-	1095	03		2	0040	305		
EP	1602	647			A1		2005	1207		EP 2	004-	7178.	33		2	0040	305	
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US	2006	0194	836		A1		2006	0831		US 2	005-	5482	83		2	0050	901	
US	7534	802			В2		2009	0519										
US	2009	0286	786		A1		2009	1119		US 2	009-	3812	90		2	0090	310	
JP	2010	1164	03		A		2010	0527	1	JP 2	010-	2879			2	0100	108	
PRIORIT	Y APP	LN.	INFO	.:						JP 2	003-	6204	2		A 2	0030	307	
									1	JP 2	004-	1160	2		A 2	0040	120	
										JP 2	004-	1095	03		A3 2	0040	305	
										WO 2	004-	JP28	12	1	W 2	0040	305	

US 2005-548283 A3 20050901

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 141:260553

GΙ

AB Title compds. e.g. I (R1, R2 = H, alkyl, cycloalkyl, Ph, substituted Ph, heteroaryl, etc.), useful as as inhibitors of angiogenesis and vascular permeability, are prepared Thus, stirring 2-(4-pyridylmethylthio)pyridine-3-carboxylic acid with 4-chloroaniline in DMF in the presence of N,N-diisopropylethylamine and O-(7-azabenzotriazol-1-yl)-N,N,N',N'-tetramethyluronium hexafluorophosphate at room temperature for 3 h gave 91% N-(4-chlorophenyl)-2-(4-pyridylmethylthio)pyridine-3-carboxamide (II). II showed angiogenesis inhibitor activity at 20 μg/mL. Formulations

containing I were given. IT 754220-09-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of compds. having 4-pyridylalkylthio group as inhibitors of angiogenesis and vascular permeability)

RN 754220-09-2 CAPLUS

CN 2-Pyridinecarboxamide, N-(4-chloropheny1)-3-[(4-pyridinylmethyl)thio]-(CA INDEX NAME)

IT 754218-68-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of compds. having 4-pyridylalkylthio group as inhibitors of angiogenesis and vascular permeability)

RN 754218-68-3 CAPLUS

CN 2-Pyridinecarboxylic acid, 3-[(4-pyridinylmethyl)thio]- (CA INDEX NAME)

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD

(14 CITINGS)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:532638 CAPLUS

DOCUMENT NUMBER: 139:101146

TITLE: Preparation of benzyl or heterocyclylmethyl phenyl or

heterocyclyl sulfones as β -amyloid protein

production/secretion inhibitors

INVENTOR(S): Yasukochi, Takanori; Ito, Masayuki; Kubota, Hideki;

Miyauchi, Satoshi; Saito, Masaki

PATENT ASSIGNEE(S): Daiichi Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 540 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT :	KIN	CIND DATE				APPL	ICAT	ION I		DATE						
WO 2003055850					A1 20030710				WO 2	002-	JP13	792		20021227 <			
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		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,
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EP	1466	898			A1		2004	1013		EP 2	002-	7909.	37		2	0021	227 <
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CN 1585746
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PRIORITY APPLN. INFO.:
                                          JP 2001-395701
                                                              A 20011227
                                          WO 2002-JP13792
                                                              W 20021227
                                          US 2004-500156
                                                             A3 20040625
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 139:101146

Novel compds. having various substituents as represented by the following general formula R1(R2)(R3)C-X-R4, salts thereof, and solvates of the same [wherein X = S, SO, SO2; R1 = CR5R6R7, NR8R9, X1R10, X2R11; wherein R5, R6, R7 = halo, cyano, NO2, -Q51-Q52-Q53-Q54; Q51, Q53 = single bond, CO, S(0), SO2, COCO, COC(S), C(S)C(S); Q52 = single bond, O, ON(A51), ON(COA51), N(A51), N(COA51), N(CO2A51), N[CON(A51)(A52)], N(OA51), N(NA51A52), N(A51)N(A52), N(COA51)N(A52), N(A51)-O, N(COA51)-O, N:N, C(A51):N, C(A51):N-O, C(A51):N-N(A52), N:C(A51), O-N:C(A51), N(A51)-N:C(A52), C(:NA51)-N(A52); Q54 = A53, OA53, N(A53)(A54), SA53, NA54-OA53, NA55-N(A53)(A54), O-N(A53)(A54); wherein A51, A52, A53 = H, (un) substituted hydrocarbyl or heterocyclyl; R2, R3, R4, R8, R9, R10, R11 = -Q51-Q52-Q53-Q54 defined in R5-R7; X1 = 0, S; X2 = S0, S02; or R1 and R2 or R3 and R4 are combined together to form (un)substituted cyclohydrocarbyl or heterocyclyl] are prepared These compds. have an effect of inhibiting the production/secretion of a β -amyloid protein and are useful for the prevention or treatment of diseases caused by unusual production/secretion of β -amyloid, in particular Alzheimer's disease or Down's syndrome. Thus, a solution of 100 mg 2,5-dichloro-4-[(4-chlorophenylthio)-(2,5-difluorophenyl)methyl]pyridine (preparation given) and 200 μL morpholine in 1.0 mL 1,4-dioxane was stirred at 100° for 2 days to give 4-[5-chloro-4-[(4-chlorophenylthio)-(2,5difluorophenyl)methyl]pyridin-2-yl]morpholine which (90 mg) was dissolved in 12 mL MeOH, treated with 60 mg ammonium molybdate tetrahydrate [(NH4)6Mo7024.4H20] and 6 mL 30% H202, and stirred for 8 h to give 83% 4-[5-chloro-4-[(4-chlorophenylsulfonyl)-(2,5-difluorophenyl)methyl]pyridin-2-yl]morpholine (I). I in vitro glioma cell (H4 cell) expressing human β -amyloid protein precursor protein gene (APP751 gene) with EC50 of ≤50 nM.

IT 558465-25-1P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of benzyl or heterocyclylmethyl Ph or heterocyclyl sulfones as β -amyloid protein production/secretion inhibitors for treatment or preparation of Alzheimer's disease or Down's syndrome)

RN 558465-25-1 CAPLUS

CN Pyridine, 2-chloro-5-[[(3-chloro-4-pyridiny1)(2,5-difluorophenyl)methyl]thio]- (CA INDEX NAME)

IT 558465-26-2P 558465-27-3P 558465-49-9P

558465-50-2P 558465-75-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzyl or heterocyclylmethyl Ph or heterocyclyl sulfones as $\beta\text{-amyloid}$ protein production/secretion inhibitors for treatment or preparation of Alzheimer's disease or Down's syndrome)

RN 558465-26-2 CAPLUS

CN Pyridine, 2-chloro-5-[[(3-chloro-4-pyridiny1)(2,5-difluoropheny1)methy1]sulfony1]- (CA INDEX NAME)

RN 558465-27-3 CAPLUS

CN Pyridine, 5-[[(3-chloro-4-pyridinyl)(2,5-difluorophenyl)methyl]sulfonyl]-2-fluoro- (CA INDEX NAME)

RN 558465-49-9 CAPLUS

CN Pyridine, 2-chloro-5-[[(3,6-dichloro-2-pyridinyl)-4-pyridinylmethyl]thio]-

(CA INDEX NAME)

RN 558465-50-2 CAPLUS

CN Pyridine, 3,6-dichloro-2-[[(6-chloro-3-pyridinyl)sulfonyl]-4-pyridinylmethyl]- (CA INDEX NAME)

RN 558465-75-1 CAPLUS

CN Pyridine, 2-chloro-5-[[(3,6-dichloro-2-pyridinyl)-4-pyridinylmethyl]sulfinyl]- (CA INDEX NAME)

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD

(12 CITINGS)

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:171629 CAPLUS

DOCUMENT NUMBER: 136:226767

TITLE: Cephalosporin antibiotics and prodrugs thereof

INVENTOR(S): Glinka, Tomasz W.

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.					KIND DATE				ICAT	ION 1		DATE			
							WO 2001-US26628						20010823 <			
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	1333836															823 <
	R: AT		,	•							LI,	LU,	NL,	SE,	MC,	PT,
חח	20010136	SI,									1262	Л		2	0010	000 /
DR 77	2001013	001		A.		2004	0203		DK	003 001-	1201	4		2	0010	023 <
ZA TD	20030013 2004507	101		A T		2004	0220		д д . Z	003-	1091	20		2	0010	023 <
	524438													2		
	2281948			C2			0820				-					-
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	283681	120		B												
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	Y APPLN.	-		11		2001	01		US 2	000-	2291	74P		P 2 W 2	0000	829

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 136:226767

AB The present invention relates to novel cephalosporin antibiotics, prodrugs thereof and pharmacol. acceptable salts of either, which are active against a wide spectrum of bacteria that are resistant to present clin. $\beta\text{--lactam}$ antibiotics. E.g., I among many other similar cephalosporin derivs. was prepared Compds. were evaluated for antimicrobial activity against a panel of bacterial strains, mainly Staphylococcus aureus and the compds. were also tested in mice challenged i.p. with a bacterial suspension of S. aureus.

IT 315181-86-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cephalosporin antibiotics and prodrugs)

RN 315181-86-3 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,
7-[[(2Z)-2-(2-amino-5-chloro-4-thiazolyl)-2-(hydroxyimino)acetyl]amino]-3[[3-[[(2-amino-3-pyridinyl)thio]methyl]-4-pyridinyl]thio]-8-oxo-, (6R,7R)(CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:780048 CAPLUS

DOCUMENT NUMBER: 134:71401

TITLE: SAR studies of anti-MRSA non-zwitterionic

3-heteroarylthiocephems

AUTHOR(S): Glinka, T. W.; Cho, A.; Zhang, Z. J.; Ludwikow, M.;

Griffith, D.; Huie, K.; Hecker, S. J.; Dudley, M. N.;

Lee, V. J.; Chamberland, S.

CORPORATE SOURCE: Microcide Pharmaceuticals, Mountain View, CA, USA

SOURCE: Journal of Antibiotics (2000), 53(10),

1045-1052

CODEN: JANTAJ; ISSN: 0021-8820

PUBLISHER: Japan Antibiotics Research Association

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

AΒ Structure activity relationship studies in a series of 3-heteroarylthio substituted cephalosporins established that high activity against methicillin-resistant Staphylococcus aureus (MRSA) can be achieved with various heteroaryl substituents. Early results showed that highly lipophilic 3-heteroarylthio substituents, which were necessary for anti-MRSA activity, caused high affinity of such cephems toward serum proteins. The authors earlier published efforts described discovery of zwitterionic cephems MC-02,331 and RWJ-54428 (MC-02,479), where serum binding was reduced by employing basic, pos. charged functionalities attached to the 3-heteroarylthio substituent. In order to avoid low solubility problems associated with most such zwitterionic cephalosporins a wide variety of non-basic heteroaryl substituents, e.g. I, was tested (non-zwitterionic cephems are more easily formulated as water soluble sodium salts for i.v. administration). Considerable reduction in serum binding was obtained in some analogs while maintaining high anti-MRSA potency.

IT 315181-83-0P 315181-86-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and structure activity relationship studies of anti-methicillin-resistant Staphylococcus aureus non-zwitterionic 3-heteroarylthiocephems)

RN 315181-83-0 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-2-(2-amino-5-chloro-4-thiazolyl)-2-(hydroxyimino)acetyl]amino]-8-oxo-3-[[3-[(3-pyridinylthio)methyl]-4-pyridinyl]thio]-, (6R,7R)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 315181-86-3 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,
7-[[(2Z)-2-(2-amino-5-chloro-4-thiazolyl)-2-(hydroxyimino)acetyl]amino]-3[[3-[[(2-amino-3-pyridinyl)thio]methyl]-4-pyridinyl]thio]-8-oxo-, (6R,7R)(CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD

(6 CITINGS)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:529133 CAPLUS

DOCUMENT NUMBER: 131:157711

TITLE: Preparation of pyridinecarboxylates and analogs as

cholesteryl ester transfer protein inhibitors

INVENTOR(S): Lee, Len F.; Glenn, Kevin C.; Connolly, Daniel T.;

Corley, David G.; Flynn, Daniel L.; Hamme, Ashton; Hegde, Shridhar G.; Melton, Michele A.; Schilling, Roger J.; Sikorski, James A.; Wall, Nancy N.;

Zablocki, Jeffrey A.

PATENT ASSIGNEE(S): G.D. Searle and Co., USA SOURCE: PCT Int. Appl., 327 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.						KIND DATE					ICAT	DATE						
	WO	WO 9941237				A1 19990819					 WO 1		19990211 <			<			
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			ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	
			MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	
			TR,	TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZW								
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			FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	
			CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG							
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											US 2	000-	6008	70		A3 2	0001	211	
											US 2	003-	4039	03		A3 2	0030	331	
3 0 0 T C			T 0 T 0	D 7 7 7	O D TT	0			TT 3 D			TTO D	T 0 D T		O D 1 1 7	-			

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 131:157711
GI

AB Title compds. [I; R2,R6 = H, OH, (fluoro)alkyl, alkoxy, etc.; R3 = OH, CHO, alkoxycarbonyl, (hetero)arylcarbonyl, etc.; R5 = H, halo, alkyl, alkoxy, etc.; R5 = H, halo, alkyl, alkoxy(carbonyl), etc.] were prepared Thus, CF3C(NH2):C(CO2Me)COMe was refluxed with Ac2O/HC(OMe)3 and the product converted in 2 steps to I (R2 = CF3, R3 = CO2Me, R4 = OCHMe2, R5 = R6 = H). Data for biol. activity of I were given.

IT 237758-70-2P 237758-71-3P 237759-21-6P 237759-29-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of pyridinecarboxylates and analogs as cholesteryl ester transfer protein inhibitors)

RN 237758-70-2 CAPLUS

CN 3-Pyridinecarboxylic acid, 2-(difluoromethyl)-5-[[[6-(difluoromethyl)-5-(methoxycarbonyl)-4-(2-methylpropyl)-2-(trifluoromethyl)-3-pyridinyl]methyl]thio]-4-(2-methylpropyl)-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)

RN 237758-71-3 CAPLUS

CN 3-Pyridinecarboxylic acid, 2-(difluoromethyl)-5-[[[6-(difluoromethyl)-5-(methoxycarbonyl)-4-(2-methylpropyl)-2-(trifluoromethyl)-3-pyridinyl]carbonyl]thio]-4-(2-methylpropyl)-6-(trifluoromethyl)-, methylester (CA INDEX NAME)

RN 237759-21-6 CAPLUS

CN 3-Pyridinecarboxylic acid, 2-(difluoromethyl)-4-(2-methylpropyl)-5-[(2-pyridinylmethyl)thio]-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)

RN 237759-29-4 CAPLUS

CN 3-Pyridinecarboxylic acid, 2-(difluoromethyl)-4-(2-methylpropyl)-5-[(2-quinolinylmethyl)thio]-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS

RECORD (19 CITINGS)

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:487274 CAPLUS

DOCUMENT NUMBER: 131:116520

TITLE: Preparation of phenylalanine derivatives as

pharmaceutical agents

INVENTOR(S): Head, John Clifford; Archibald, Sarah Catherine;

Warrellow, Graham John; Porter, John Robert

PATENT ASSIGNEE(S): Celltech Therapeutics Limited, UK

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIND DATE			1	APPL	ICAT	ION		DATE				
WO 9937618					A1 19990729					WO 1	999-	GB27		19990127 <			
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		ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,
		MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,

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             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6329372
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                                20011211
                                            US 1999-237060
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                                19990809
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                                20001115
                                            EP 1999-903798
                                                                    19990127 <--
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             IE, FI
     JP 2002501051
                                20020115
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                                                                    20010926 <--
PRIORITY APPLN. INFO.:
                                            GB 1998-1674
                                                                 A 19980127
                                             GB 1998-26669
                                                                 A 19981203
                                             US 1999-237060
                                                                 A1 19990126
                                            WO 1999-GB279
                                                                 T<sub>A</sub>T
                                                                    19990127
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
                        MARPAT 131:116520
OTHER SOURCE(S):
    Phenylalanine derivs. 4-[R1(Alk1)rL1s]C6H2RaRb(Alk2)mCHRR2NR3COHet [R is a
     carboxylic acid or derivative; R1 = H, OH, alkoxy or optionally substituted
     cycloaliph., polycycloaliph., heterocycloaliph., polyheterocycloaliph.,
     arom, or heteroarom. group; Alk1 = optionally substituted aliphatic or
     heteroaliph. chain; L1 is a linker atom or group; r, s = 0, 1; Ra, Rb =
     -L2(CH2)pL3Rcq, where L2, L3 = a covalent bond or linker atom or group; p
     = 0, 1; q = 1-3; Rc = H, halo, alkyl, OH, alkoxy, etc.; Alk2 = alkylene; m
     = 0, 1; R2 = H, Me; R3 = H, alkyl; Het is an optionally substituted
     heteroarom. group] and their salts, solvates, hydrates and N-oxides were
     prepared as pharmaceutical agents. Thus,
     N-(2-chloronicotinoy1)-N'-(3,5-dichloro-4-picoly1)-L-4-aminophenylalanine
     was prepared by coupling reaction of
     N-(3,5-dichloro-4-picoly1)-L-4-aminophenylalanine Me ester with
     2-chloronicotinoyl chloride followed by ester hydrolysis. Title compds.
     were tested for inhibition of integrin-dependent cell adhesion and
     generally have IC50 values in the \alpha 4\beta 1 and \alpha 4\beta 7
     assays of 1\mu M and below.
ΤТ
     232617-68-4P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of phenylalanine derivs. as pharmaceutical agents)
RN
     232617-68-4 CAPLUS
CN
     L-Phenylalanine, 4-[[(3,5-dichloro-4-pyridinyl)carbonyl]amino]-N-[[3-[(3-
```

pyridinylmethyl)thio]-4-pyridinyl]carbonyl]- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS

RECORD (27 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1998:779062 CAPLUS

DOCUMENT NUMBER: 130:124973

TITLE: Selective thiophilic addition of alkyl- and

aryllithiums to dithio esters and a sulfine in the

pyridine series

AUTHOR(S): Lempereur, Claude; Ple, Nelly; Turck, Alain;

Queguiner, Guy; Corbin, Florence; Alayrac, Carole;

Metzner, Patrick

CORPORATE SOURCE: Laboratoire de Chimie Organique Fine et Heterocyclique

(UPRESA CNRS 6014), IRCOF, INSA, Mont Saint-Aignan,

76131, Fr.

SOURCE: Heterocycles (1998), 48(10), 2019-2034

CODEN: HTCYAM; ISSN: 0385-5414

PUBLISHER: Japan Institute of Heterocyclic Chemistry

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 130:124973

GΙ

AB Nucleophilic addition reactions of Me 2- and 3-pyridinedithiocarboxylate esters and sulfine (S-thiocarbonyl oxide) I with various aryl- and alkyllithiums at -78°C afforded dithio acetals or their oxides arising from a thiophilic addn of alkyllithium reagents at sulfur and subsequent alkylation or protonation at carbon. E.g., nucleophilic addition of n-butyllithium to I in anhydrous THF followed by protonation with water in THF gave the (methylthio)butylsulfanylmethylpyridine II in 90% yield after workup. The intermediate carbanions can be trapped by alkyl halides or an aldehyde. E.g., nucleophilic addition of phenyllithium to Me 3-pyridinedithiocarboxylate in THF followed by alkylation with allyl bromide gave III in 78% yield. This provides a new entry to pyridyl acyl anions, "Umpolung" synthons.

IT 219880-03-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of pyridinedithioacetals by regioselective nucleophilic addition

of alkyllithiums and aryllithiums to pyridinedithiocarboxylate and pyridinedithiocarboxylate S-oxides and alkylation at carbon)

RN 219880-03-2 CAPLUS

CN Pyridine, 2,6-dimethoxy-3-[[1-(methylthio)-1-(2-pyridinyl)ethyl]thio]-(CA INDEX NAME)

OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1957:52145 CAPLUS

DOCUMENT NUMBER: 51:52145 ORIGINAL REFERENCE NO.: 51:9711d

TITLE: Pyridine homolog INVENTOR(S): Bamford, Wm. R.

PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd.

DOCUMENT TYPE: Patent LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

GB 758076 19560926 GB <---

AB See U.S. 2,769,007 (C.A. 51, 6704e).

IT 99984-79-9P, Pyridine, 3-(4-pyridylmethylsulfonyl)-

RL: PREP (Preparation) (preparation of) 99984-79-9 CAPLUS

RN 99984-79-9 CAPLUS
CN Pyridine, 3-[(4-pyridinylmethyl)sulfonyl]- (CA INDEX NAME)

L7 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1957:17515 CAPLUS

DOCUMENT NUMBER: 51:17515
ORIGINAL REFERENCE NO.: 51:3671a-e

TITLE: 3-Pyridinesulfinic acid and derivatives INVENTOR(S): Goldberg, Moses W.; Teitel, Sidney

PATENT ASSIGNEE(S): Hoffmann-La Roche Inc.

DOCUMENT TYPE: Patent LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

The condensation of 3-pyridinesulfonyl chloride (i) with N2H4.H2O (II) and subsequent reaction with CO compds. containing 3 or more C atoms gives 3-pyridinesulfinic acid (III). Thus, treating 25 g. 100% II in 150 ml. EtOH with 30 g. I below 50°, cooling the mixture to room temperature, filtering it, adding C6H6 to the filtrate, concentrating (to remove the H2O-C6H6-EtOH ternary), filtering the concentrated solution, concentrating the

 $\mbox{H2O-C6H6-EtOH ternary)}$, filtering the concentrated solution, concentrating the filtrate to

50 ml., adding MeCN until turbid, storing overnight at 4° and filtering, yields 3-pyridinesulfonic acid hydrazide (IV), pale yellow crystals, m. $100-2^{\circ}$. Adding with stirring 15 ml. Me2CO (V) to 50

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g. IV in 100 ml. \rm H20 at a maximum temperature of 50^{\circ}, diluting with 1600 ml. \rm V,
storing 3 hrs. at 4^{\circ}, filtering, washing with V, and air-drying
yields III, m. 161-3°. The preparation is described of the following
derivs. of III (m.p. given): p-nitrophenyl 3-pyridyl sulfone,
172-4°; 1-methyl-3-(p-nitrophenylsulfonyl) pyridinium
bromide-1/2H2O, 294-6° (decomposition); 3-pyridyl 4-pyridyl sulfone (VI)
124-5°; VI.MeBr, 141-3° (decomposition); p-nitrobenzyl 3-pyridyl
sulfone (VII), 204-5° (decomposition); VII.MeBr, 227-8°
(decomposition); 3-(p-nitrobenzylsulfonyl)-1-propylpyridinium bromide,
217-18° (decomposition); 3-(p-nitrobengylsulfonyl)-1-butylpyridinium
bromide, 208-9° (decomposition);
3-(p-nitrobenzylsulfonyl)-1-allylpyridinium bromide, 185-6°
(decomposition); 3-(p-nitrobenzylsulfonyl)-1-benzyl-pyridinium bromide,
208-10° (decomposition); 3-(p-nitrobenzyl-sulfonyl)-1-(p-
nitrobenzyl)pyridinium bromide, 137-9° (decomposition); m-nitrobenzyl
3-pyridyl sulfone, 158-60° (decomposition);
3-(m-nitrobenzylsulfonyl)-1-methylpyridinium bromide, 225-6°
(decomposition); p-nitrophenethyl 3-pyridyl sulfone, 171-3°;
3-(p-nitrophenethylsulfonyl)-1-propylpyridinium bromide, 172-4°;
p-aminobenzyl 3-pyridyl sulfone, 166-8^{\circ}; p-acetamidobenzyl 3-pyridyl sulfone (VIII), 181-3^{\circ} (decomposition); VIII.MeBr,
225-6° (decomposition); p-chlorobenzyl \overline{3}-pyridyl sulfone (IX), 163-4°; IX.MeBr, 225-7° (decomposition); \overline{3}-pyridyl
4-pyridylmethyl sulfone (X), 150-2°; X.MeBr, 199-201° (decomposition); 2-(4-pyridyl)ethyl 3-pyridyl sulfone-2HCl (XI.-2HCl),
170-2^{\circ} (decomposition); XI.2MeBr, 202-3^{\circ} (decomposition);
XI.2PhCH2Br.2H2O, 183-5° (decomposition); 2-(g-pyridyl)-ethyl 3-pyridyl
sulfone-2HCl (XII.2HCl, 169-71° (decomposition); XII.2MeBr 196-7°
(decomposition); XII.HBr.p- O2NC6H4CH4Br, 178-9° (decomposition).
compds. are useful as antimetabolites, possessing antiniacin activity.
99984-79-9P, Pyridine, 3-(4-pyridylmethylsulfonyl)-
RL: PREP (Preparation)
   (preparation of)
99984-79-9 CAPLUS
Pyridine, 3-[(4-pyridinylmethyl)sulfonyl]- (CA INDEX NAME)
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ΙT

RN

CN